

ALIEN POKER INSTRUCTION BOOKLET

This booklet provides game operation, bookkeeping, game adjustment, and diagnostic procedures for ALIEN POKER. For installation and special maintenance information refer to the blue-covered game manual. For detailed information refer to Williams Solid State Flipper Maintenance Manual.

SPECIAL CONSIDERATIONS WHEN REPLACING CIRCUIT BOARDS

CPU Board

- 1. For memory protection feature, revision level 6 CPU Boards (batteries located on lower right corner of board) must be used. Revision level 4 CPU Boards equipped with IC14 and IC26 sockets may be used but the memory protection feature is lost.
- 2. Must be equipped with green-labeled ALIEN POKER game ROM and green-labeled flipper ROMs.
- 3. Jumper J3 must be connected and J4 removed.

Sound Board

- 1. Model D 8224 with jumper J1 removed required for speech.
- 2. Must be jumpered for white-labeled sound ROM operation and be equipped with Sound ROM 2. (Jumpers W2, W5, W7, W9, W10, and W15 connected; W3, W4, W6, W8, W11, W12, and W13 removed)

Power Supply Board

1. Fuse F4 (10A SB) for flipper solenoids must be installed.

Optional Speech Module

1. Requires 5T5011 (IC7), 5T5012 (IC5), and 5T5013 (IC6) speech ROMs.

Display Boards

Model C 8363 Master Display and 7-digit Slave Displays required.

GAME OPERATION

*Indicates adjustable features

Game Over Mode - Turn game ON; player scores show zero, high score to date* alternates with player 1 score, player 1 up lamp flashes, game over lamp lights, all playfield lamps except for credit lamp cycle in attract mode.

Credit Posting - Insert coin; knocker sounds, number of credits displayed. If maximum credits* exceeded by coin or high score to date*, credits are posted correctly, coin lockout de-energized until remaining credits are below maximum. No credits may be won and coins are rejected while lockout is energized.

Game Start - Push credit button; start-up tune played, ball served, credit display reduced by one, player 1 up lamp flashes until first scoring switch is made, ball in play shows 1. Pushing credit button before ball 2 displayed allows additional players.

LANE CHANGE is a trademark of Williams Electronics, Inc.

Bonus - Bonus is advanced once by making any top King rollover and is advanced three times by making an Ace eject hole. The bonus multiplier is advanced from 2x through 5x by making lit Joker targets. When 5x is achieved, making flashing Joker target scores 10,000. Lit and flashing Joker targets are randomly selected.

4 Kings - Spotting 4 Kings advances Royal Flush multiplier from 2x through 4x. Lighting 3x lights the spinner. Lighting of King rollovers lights an associated jet bumper. Operating the right flipper button rotates King rollover lamps and jet bumper lamps (LANE CHANGE feature). Making the lower left inside rollover spots a King rollover lamp.

Royal Flush - Making Diamond Royal Flush drop targets in sequence (10, Jack, Queen, King, Ace) scores highest lit value. Making a drop target out of sequence decreases the lit value and lights the Spade Ace eject hole to increase the lit value. With the lit value less than maximum, making a target in sequence or the Spade Ace eject hole increases the lit value. Targets made out of sequence are individually reset.

POKER - Making Spade Ace, Heart Ace, and Club Ace eject holes advances lighting of P-O-K-E-R. Spotting "K" lights the Heart Ace and Club Ace eject holes for an Extra Ball. Spotting "R" alternately lights the left and right outlanes for a Special.

Extra Ball - Maximum of one* Extra Ball per ball.

Memory - King rollovers, partial Royal Flush, spinner lamp, Royal Flush bonus multipliers, *partial lighting of P-O-K-E-R, *Ace eject hole, *Royal Flush lit value, *Extra Ball lamp.

The following phrases and conversations are produced during game play.

Achievement

Game Start Advance Bonus Multiplier Advance Royal Flush value from Spade Ace Eject Hole Advance Royal Flush Bonus Multiplier Score Royal Flush Win Extra Ball Win Special Exceed million, 2 million, etc High Score to Date (HSTD)

Response

ALIEN POKER. You deal. I deal Joker.

You raise. Raise jackpot. Royal Flush. I fold, you win. You win jackpot. You fold, I win. Million jackpot, I raise a million.

Big jackpot. Big winner. Big Deal.

You win jackpot, you deal.

Game Over Random Phrase

You win jackpot, you deal. You fold, I deal.

You raise jackpot.

I raise, you deal. When I win, I win big.

When I deal, I win.

Game over after special or with HSTD or Match

^{*}Indicates adjustable features.

BOOKKEEPING AND EVALUATION TOTALS

(Functions 01-12)

- 1. In game over mode, set toggle switch to AUTO-UP and depress ADVANCE pushbutton. Test 04 is indicated in number of credits display, Function 00 in ball in play display, and game identification in Player 1 display.
- 2. Operate the ADVANCE pushbutton to display each function on the ball in play display (see Table 1) and record each total from Player 1 display. (To reveiw a total that has been advanced past, set toggle switch to MANUAL-DOWN and operate the ADVANCE pushbutton.)
- Calculate the following if desired:
 Paid Credits = Function 04 ÷ Function 08
- 4. Turn the game OFF and back ON to return to game over mode.
- 5. To change current High Score to Date to value of Function 13, momentarily depress HIGH SCORE RESET pushbutton.
- 6. To zero Functions 01-11, see page 7

GAME ADJUSTMENT PROCEDURE

(Functions 13-35)

Coin door must be open to change settings.

- 1. In game over mode, set toggle switch to AUTO-UP and depress ADVANCE pushbutton. Test 04 is indicated in number of credits display, Function 00 in ball in play display, and game identification in Player 1 display.
- To raise Function number in ball in play display, operate ADVANCE pushbutton with switch set to AUTO-UP. To lower Function number operate ADVANCE with it set to MANUAL-DOWN.
- 3. With desired Function indicated in ball in play display, raise value in player I display by operating credit button with switch set to AUTO-UP; lower value by operating credit button with it set to MANUAL-DOWN. Value left of Player I display is new setting. For values see Table 1 and (for pricing) Table 2.
- 4. Repeat steps 2 and 3 until all required adjustments have been made.
- 5. Turn game OFF and back ON to return to game over mode.
- 6. To restore factory settings and zero audit totals, see page 7.

DIAGNOSTIC PROCEDURES

(Display Digits, Lamp, Solenoid, and Switch Tests)

- In game over mode, set toggle switch to MANUAL-DOWN and depress ADVANCE. All
 displays should go blank.
- 2. Momentarily depress ADVANCE and set toggle switch to AUTO-UP. Display Digits test is performed.
- 3. Momentarily depress ADVANCE. Test 01 is indicated on number of credits display and Lamp Test is performed.
- 4. Set toggle switch to MANUAL-DOWN and momentarily depress ADVANCE. Test 02 is indicated on number of credits display and solenoid 01 on the ball in play display; solenoid 01 is pulsed by driver board.
- 5. Operate ADVANCE to pulse each solenoid (see Figure 3).
- 6. Set toggle switch to AUTO-UP and momentarily depress ADVANCE. Test 03 is indicated on number of credits display and stuck switches on ball in play display.
- 7. See Figure 4. Operate switches; switch number is indicated on ball in play display.
- 8. Turn game OFF and back ON to return to game over mode.
- 9. To set up Auto-Cycle Mode (Display Digits, Lamp, and Solenoid Tests) see page 7.

Table 1. Game Adjustments

FUNCTION	DESCRIPTION	NOTES	FACTORY Setting
00	Game Identification	1	1501 1
01	Coins, Left Chute (Closest to coin door hinge)	1	_
02	Coins, Center Chute	!	
03	Coins, Right Chute	1	- - - - - -
04	Total Paid Credits	li	
05 06	Total Specials Total Replay (Extra Ball) Scores	li	
07	Match and High Score to Date Credits	i	_
08	Total Credits	1,2	_
09	Total Extra Balls	1,3	-
10	Total Ball Time in Minutes		
11	Total Number of Balls Played	!	
12	Current High Score to Date	4	1,000,000
13	Backup High Score to Date	5 6	1,000,000 700,000
14	Replay 1 Score	6	1,100,000
15	Replay 2 Score Replay 3 Score	6	0,100,000
16 17	Replay 4 Score	6	Ö
18	Maximum Credits	7	20
19	Standard and Custom Pricing Control (00-07)	8	02
20	Left Coin Slot Multiplier	8	01
21	Center Coin Slot Multiplier	8	04
22	Right Coin Slot Multiplier	8	01
23	Coin Units Required for Credit	8	01 00
24	Coin Units Bonus Point	8 8 8 5	03
25	High Score Credits	_	00 1
26	Match/Multiple Extra Ball 00 = Match ON, I Extra Ball per Ball		"
	01 = Match OFF, 1 Extra Ball per Ball		
	10 = Match ON, Multiple Extra Ball		
	11 = Match OFF, Multiple Extra Ball		
27	Special		00
	00 = Awards Credit		{
	01 = Awards Extra Ball]	
	02 = Awards Points	1	00
28	Scoring Awards		••
	00 = Credits at Replay Score 01 = Extra Ball at Replay Score		
29	Maximum Plumb Bob Tilts (1-9)	_	03
30	Number of Balls (03 or 05)		03
31	P-O-K-E-R Features	_	10
".	00 = No Lamp Memory, "P" not lit initially		
	01 = No Lamp Memory, "P" lit initially 10 = Lamps on Memory, "P" not lit initially		
	10 = Lamps on Memory, "P" not lit initially	i	
1	11 = Lamps on Memory, "P" lit initially	l	00
32	Extra Ball Control 00 = Extra Ball lights with "K"		"
	01 = No Extra Ball	1	[
33	Ace Eject Hole Memory/Background Sound	-	01
33	00 = No Lamp Memory, Background Sound ON		
	01 = Lamps on Memory, Background Sound ON	İ	l
	10 = No Ľamp Memory, Background Sound OFF		,
	11 = Lamps on Memory, Background Sound OFF		
34	Extra Ball Lamp Memory		00
	00 = Lamp on Memory	ł	
٦,	01 = No Lamp Memory	l _	01
35	Royal Flush Value Memory/Attract Mode Sounds 00 = Lamps on Memory, Attract Mode Sounds	_	",
	00 = Lamps on Memory, Attract Mode Sounds 01 = Lamps Reset to 100,000 Attract Mode Sounds		1
	10 = Lamps on Memory, No Attract Mode Sounds	1	<u> </u>
	11 = Lamps Reset to 100,000, No Attract Mode Sounds	1	
		L	

Notes:

- 1. Functions 00-11 cannot be changed from the coin door; however, Functions 01-11 can be set to zero as described on page 7.
- Total Credits (Function 08) is the sum of Function 04 and as applicable, Functions 05, 06, and 07.
- 3. Total Extra Balls (Function 09) is the sum of the game extra ball feature and Functions 05 and 06, as applicable.
- 4. Current High Score to Date (Function 12) can be changed to the value of the Backup High Score to Date (Function 13) by operating the HIGH SCORE RESET switch while in the game over mode.
- Function 13 may be set to any multiple of 100,000 points. Setting Function 25 to zero with Function 13 set to any score but zero permits the High Score to Date feature to operate but no credits are awarded.
- 6. Functions 14-17 (Replay Scores) may be set to any multiple of 100,000 points. Setting a function to zero disables the replay score point. Always disable the Replay 4 level first, the Replay 3 level second, etc. The replay levels must be set with ascending values.
- 7. Setting Maximum Credits (Function 18) to zero places the game in a free play mode.
- 8. With Function 19 set to 00, Functions 20-24 must be set manually. Refer to Table 2 for seven standard pricing schemes (selected by values of 01-07 for Function 19) and custom pricing values.

RECOMMENDED SCORE LEVELS

CREDIT GAMES

3-Ball: *700,000; 1,100,000 5-Ball: 1,100,000; 1,900,000

EXTRA BALL

3-Ball: 500,000 5-Ball: 700,000

*Factory Setting

Table 2. Standard and Custom Price Settings

Twin-Quarter 1/25c, 3/50c, 7/51 Twin-Quarter 1/25c, 3/50c, 7/51 coin only 1/25c, 3/50c, 6/51 1/25c, 3/50c, 6/51 1/25c, 3/50c, 6/51 1/25c, 5/51 1/25c, 3/4 x 25c, 4/51 1/25c, 3/4 x 25c, 4/51 1/25c, 3/5c, 3/4 x 25c, 4/51 1/25c, 3/51 1/25c, 3/4 x 25c, 4/51 1/25c, 3/51 1/25c, 3/4 x 25c, 4/51 1/25c, 3/5c, 3/4 x 25c, 4/51 1/25c, 3/5c, 3/5c, 3/5c, 3/5c, 3/5c, 3/5c, 3/5c, 3/5c, 3/5			FUN	FUNCTION		
Twin-Quarter Twin-Quarter Quarter, Dollar, Quarter 1/256, 3/50e, 7/\$1 coin only 1/256, 3/\$0e, 7/\$1 coin only 1/256, 3/\$0e, 6/\$1 1/256, 3/\$0e, 6/\$1 1/256, 3/\$0e, 6/\$1 1/256, 3/\$1 1/256, 3/\$1 1/256, 3/\$1 1/256, 3/\$1 1/256, 3/\$1 1/256, 3/\$1 1/256, 3/\$1 1/256, 3/\$1 1/256, 3/\$1 1/256, 3/\$1 1/250, 3/\$2 1/250	19	20	17	22	23	77
Quarter, Dollar, Quarter 1/25¢, 3/50¢, 7/\$1 coin only 1/25¢, 3/50¢, 6/\$1 1/25¢, 3/50¢, 6/\$1 1/25¢, 3/50¢, 6/\$1 1/25¢, 5/\$1 coin only 1/25¢, 3/\$1 or \$x\$ 25¢ 1/25¢, 3/\$1 1/25¢, 3/\$1 1/25¢, 3/\$1 1/25¢, 3/\$1 1/25¢, 3/\$1 1/25¢, 3/\$2 1/25¢,	8	03	12	03	20	12
1/25¢, 7/81 coin only 1/25¢, 3/50¢, 6/81 1/25¢, 3/50¢, 6/81 1/25¢, 6/81 coin only 1/25¢, 5/81 coin only 1/25¢, 5/81 coin only 1/25¢, 5/81 coin only 1/25¢, 3/81 coin only 1/25¢, 3/81 coin only 1/25¢, 4/81 1/25¢, 4/81 1/20¢, 3/81 1/20¢, 3/81 1/20¢, 3/80¢ 1/20¢, 3/80¢ 1/20¢, 3/80¢ 1/20¢, 3/80¢ 1/20¢, 3/80¢ 1/20¢, 3/80¢ 1/20¢, 3/80¢ 1/20¢, 3/80¢ 1/20¢, 3/80¢ 1/20¢, 3/80¢ 1/20¢, 3/80¢ 1/20¢, 3/80¢ 1/20¢, 3/80¢ 1/20¢, 3/80¢ 1/20¢, 3/80¢ 1/20¢ 1		63	14	8	8	8
1/25¢, 3/50¢, 6/51	8	0	02	10	10	8
1/25¢, 6/81 coin only 1/25¢, 5/81 1/25¢, 5/81 1/25¢, 5/81 coin only 1/25¢, 5/81 coin only 1/25¢, 5/81 coin only 1/25¢, 5/81 coin only 1/25¢, 4/81 1/25¢, 3/81 1/20¢, 3/81 1/20¢, 3/81 1/20¢, 3/81 1/20¢, 3/80¢ 1/20¢, 3/80¢ 1/20¢, 3/80¢ 1/20¢, 3/20¢ 1/20¢, 3/20¢ 1/20¢, 3/20¢ 1/20¢, 3/20¢ 1/25¢, 4/1G 1/25¢, 4/1G 1/25¢, 5/1G¢ 1/25¢, 5/20¢ 1/25¢, 5/25¢ 1/25¢ 1/25¢, 5/25¢ 1/25¢ 1/25¢ 1/25¢, 5/25¢ 1/25¢	8	10	B	5	10	05
1/25¢, 5/81 1/25¢, 5/81 1/25¢, 5/81 1/25¢, 5/81 1/25¢, 5/81 1/25¢, 5/81 1/25¢, 4/81 1/20¢, 2/75¢, 3/4 x 25¢, 4/81 1/50¢, 3/81 1/50¢, 3/81 1/50¢, 3/81 1/50¢, 3/80¢ 1/10¢, 3/2DM, 14/5DM, 2/1DM, 5/2DM, 14/5DM, 1/25¢, 4/1G 1/25¢, 4/1G 1/25¢, 5/1G 1/25¢, 5/1G 1/1F, 3/2¢ 1/1F 1/1F, 3/2¢ 1/1F	8	0	90	5	6	8
1/25¢, 5/\$1 coin only 1/25¢, 4/\$1 1/25¢, 4/\$1 1/50¢, 2/75¢, 3/4 x 25¢, 4/\$1 1/50¢, 2/75¢, 3/4 x 25¢, 4/\$1 1/50¢, 2/75¢, 3/4 x 25¢, 4/\$1 1/50¢, 3/\$1 1/50¢, 3/\$1 1/50¢, 3/\$1 1/50¢, 3/\$1¢, 1/\$10Å, 3/\$2M, 14/\$DM 2/1DM, 5/2DM, 14/\$DM 2/1DM, 5/2DM, 14/\$DM 2/1DM, 5/2DM, 14/\$DM 1/20¢, 3/\$0¢ 1/20¢, 3/\$0¢ 1/25¢, 4/\$1¢ 1/25¢, 5/\$1¢ 1/25¢, 5/\$1¢ 1/25¢, 5/\$1¢ 1/25¢, 5/\$1¢ 1/25¢, 5/\$1¢ 1/25¢, 5/\$1¢ 1/25¢, 5/\$1¢ 1/25¢, 5/\$1¢ 1/25¢, 5/\$1¢ 1/25¢, 5/\$1¢ 1/25¢, 5/\$1¢ 1/25¢ 1	8	6	B	5	5	Z
1/25¢, 4/51 1/50¢, 2/75¢, 3/4 x 25¢, 4/51 1/50¢, 2/75¢, 3/4 x 25¢, 4/51 1/50¢, 3/51 1/50¢, 3/51 1/50¢, 3/51 1/50¢, 3/51 1/50¢, 3/50¢,	8	6	05	5	0	8
1/50¢, 2/75¢, 3/4 x 25¢, 4/51 or 5 x 25¢, 1/50¢, 3/51 1/50¢, 3/51 1/50¢, 3/50¢, 1/5DM, 10/5DM, 10/5DM, 10/20¢, 3/50¢, 1/10¢, 1/20¢, 3/50¢, 1/10¢, 1/20¢, 3/50¢, 1/10¢, 1/20¢, 3/50¢, 1/10¢, 1/20¢, 1/20¢, 1/10¢, 1/20¢, 1/10¢, 1/	05	5	Z	5	10	8
4/\$1 or \$ x 25¢	-03	8	15	93	3	15
1/50¢ 3/\$1 1/50¢						7
1/50¢ 1/50¢ 1/50¢ 1/50¢ 1/50¢ 1/50¢ 1/10M, 3/2DM, 10/5DM 2/1DM, 5/2DM, 14/5DM 2/1DM, 5/2DM, 14/5DM 2/1DM, 5/2DM, 14/5DM 1/20¢, 3/50¢ 1/20¢, 3/50¢ 1/20¢, 3/50¢ 1/20¢, 4/1G 1/20¢, 4/1G 1/20¢, 5/1G 1/20¢, 5/1G 1/20¢ 1/2	0	5	Z	9	20	Z
1DM, 5DM, 2DM	8	0	g	10	05	8
20-Cent, 50-Cent 1/20¢, 3/50¢ 14/5DM 2/1DM, 5/2DM, 14/5DM 1/20¢, 3/50¢ 1/20¢, 3/50¢ 1/20¢, 3/50¢ 1/20¢, 3/50¢ 1/20¢, 3/50¢ 1/20¢, 3/50¢ 1/20¢, 3/50¢ 1/20¢, 3/50¢ 1/20¢ 1/20¢, 3/10¢ 1/20¢, 5/10¢ 1/20	03	2	45	18	ક	45
1/20c, 3/50c 1 Franc, 10 Franc, 5 Franc 1/20c, 3/50c 2 S.Cent, 1/25c, 4/1G 1 Guilder, 1/25c, 5/1G 20 Yen, 100 Yen 1/1F, 3/2F 1 Franc or 1/1F, 3/2F 1 Franc 1/1F 2 Franc 1/1F 3 Franc 1/16 4 Franc 1/16 5 Franc 1/16 6 Franc 1/10F	8	13	65	26	05	65
1 Franc, 10 Franc, 5 Franc 1/2F, 3/5F only, 8/10F only 25 Cent, 1/25c, 4/1G 1/25c, 4/1G 1/25c, 5/1G 1/25c, 5/1G 1/25c, 5/1G 1/25c, 5/1G 1/25c, 5/1G 1/25c, 5/1G 1/25c, 5/20F 1/25c, 5/20F 1/25c 1/	98	90	00	15	05	00
25 Cent, 1 Guilder, 1 Guilder, 20 Yen, 100 Yen 1 Franc 1 Franc 2 Franc, 1 Franc 1 Fran	y 04	10	16	90	70	8
1 Guilder, 1/25c, 5/1G 50 Yen, 100 Yen 1 Franc or 1/1F, 3/2F 1 Win-1 Franc 1/1F 5 Franc, 1/1F 10 Franc 1/10F 10, 20 Franc 1/10F	90	10	8	3	10	8
50 Yen, 100 Yen •1/50Y, 2/100Y 1 Franc or Twin-1 Franc 1/1F, 3/2F 5 Franc, 1/1F 1/1F 10 Franc •1/5F, 2/10F 10 Franc •1/10F 10, 20 Franc •1/10F, 2/20F 10, 20 Franc •1/10F, 2/5S Twin-1 Sucre 1/3S, 2/5S	8	0	8	8	10	Z
1 Franc or	01	10	90	02	01	8
Twin-1 Franc 1/1F 5 Franc, •1/5F, 2/10F 10 Franc 1/10F Twin-2 Franc •1/2F 10, 20 Franc •1/10F, 2/20F Twin-1 Sucre 1/3S, 2/5S	8	10	10	10	10	05
5 Franc, •1/5F, 2/10F 10 Franc 1/10F Twin-2 Franc •1/2F 10, 20 Franc •1/10F, 2/20F Twin-1 Sucre 1/3S, 2/5S	8	01	01	01	10	8
10 Franc 1/10F Twin-2 Franc •1/2F 10, 20 Franc •1/10F, 2/20F Twin-1 Sucre 1/3S, 2/5S	01	10	8	07	10	8
Twin-2 Franc •1/2F 10, 20 Franc •1/10F, 2/20F Twin-1 Sucre 1/3S, 2/5S	8	5	8	05	07	8
10, 20 Franc •1/10F, 2/20F Twin-1 Sucre 1/3S, 2/5S	02	10	Z	10	01	8
Twin-1 Sucre 1/3S, 2/5S	01	10	8	02	10	8
	00	0.5	00	02	92	8
Indicates standard price settings by adjusting only Function 19. For other price settings, set Function 19 to 00 and set Functions 20	or other price settir	igs, set Fi	inction 1	to 00 an	d set Fun	ctions 20
through 24 to the values indicated in the chart.						

RESETTING AUDIT TOTALS AND ADJUSTMENTS; INITIATING AUTO-CYCLE MODE

- 1. In game over mode, set the AUTO-UP/MANUAL-DOWN switch to MANUAL-DOWN and momentarily depress the ADVANCE pushbutton. All displays should go blank.
- 2. Remove the backglass and unlatch and open the insert door.
- 3. Set all switches on the MASTER COMMAND slide switch to OFF (move to the right).
- 4. Set switch on MASTER COMMAND switch to ON (move to left):
 - a. To zero audit totals (Functions 01-11) set switch 8 to ON.
 - b. To restore factory settings and zero audit totals, set switch 7 to ON. Coin Door must remain open to restore factory settings.
 - c. For Auto-Cycle Mode set switch 6 to ON.
- Momentarily depress MASTER COMMAND ENTER pushbutton. The LEDs should blink once.
- 6. a. After zeroing audit totals turn game OFF and ON to return to game over mode.
 - b. After restoring factory settings, turn game OFF and on twice to return to game over mode.
 - c. To initiate Auto-Cycle Mode, set toggle switch to AUTO-UP and momentarily depress the ADVANCE pushbutton. Each cycle of this mode sequences through display digits test, flashes all multiplexed lamps 64 times and pulses each solenoid. To terminate the Auto-Cycle mode and go to game over, turn the game OFF and ON.

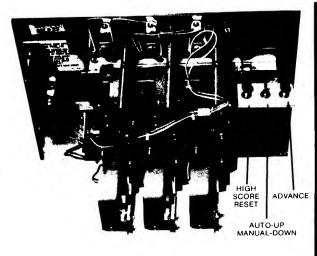


Figure 1. Coin Door Diagnostic Switches

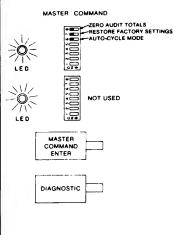
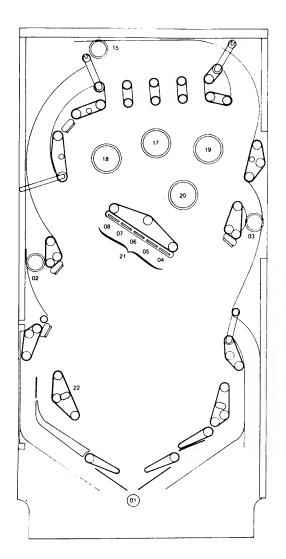


Figure 2.
Master Command
Settings Switch



SOL.

NO. FUNCTION

- 01 Ball Release
- 02 Spade Ace Eject Hole
- 03 Heart Ace Eject Hole
- "10" Drop Target Reset 04
- "J" Drop Target Reset 05
- 06
- "Q" Drop Target Reset "K" Drop Target Reset 07
- 08 "A" Drop Target Reset
- 09 Sound
- 10 Sound
- Sound 11
- Sound 12
- 13 Sound
- 14 Credit Knocker
- 15 Club Ace Eject Hole
- 16 Coin Lockout
- 17 Center Jet Bumper
- 18 Left Jet Bumper
- 19 Right Jet Bumper
- 20 Bottom Jet Bumper
- 21 Drop Target Release 22 Left Kicker

Table 3. Solenoid Connections

SOL.		WIRE		DRIVER	SOLENOID
NO.	FUNCTION	COLOR	CONNECTIONS	TRANS.	PART NO.
01	Ball Release	GRY-BRN	2P11-4, 8P3-17	Q15	SA-23-850-DC
02	Spade Ace Eject Hole	GRY-RED	2P11-5, 8P3-18	Q17	SG3-23-850-DC
03	Heart Ace Eject Hole	GRY-ORN	2P11-7, 8P3-19	Q19	SG3-23-850-DC
04	"10" Drop Target Reset	GRY-YEL	2P11-8, 8P3-20	Q21	SA3-24-750-DC
05	"J" Drop Target Reset	GRY-GRN	2P11-9, 8P3-21	Q23	SA3-24-750-DC
06	"Q" Drop Target Reset	GRY-BLU	2P11-3, 8P3-22	Q25	SA3-24-750-DC
07	"K" Drop Target Reset	GRY-VIO	2P11-2, 8P3-23	Q27	SA3-24-750-DC
08	"A" Drop Target Reset	GRY-BLK	2P11-1, 8P3-24	Q29	SA3-24-750-DC
09	Sound	BRN-BLK	2P9-9, 10P3-3	Q31	_
10	Sound	BRN-RED	2P9-7, 10P3-2	Q33	_
111	Sound	BRN-ORN	2P9-1, 10P3-5	Q35	_
12	Sound	BRN-YEL	2P9-2, 10P3-4	Q37	_
13	Sound	BRN-GRN	2P9-3, 10P3-7	Q39	_
14	Credit Knocker	BRN-BLU	2P9-4, 7P1-16	Q41	SA-23-850-DC
15	Club Ace Eject Hole	BRN-VIO	2P9-5, 8P3-1	Q43	SG-23-850-DC
16	Coin Lockout	BRN-GRY	2P9-6, 7P1-18, 7P2-4	Q45	SM-35-4000-DC
*17	Center Jet Bumper	BLU-BRN	2P12-7, 8P3-11	Q2	SG-23-850-DC
*18	Right Jet Bumper	BLU-RED	2P12-4, 8P3-12	Q4	SG-23-850-DC
*19	Left Jet Bumper	BLU-ORN	2P12-3, 8P3-13	Q6	SG-23-850-DC
*20	Bottom Jet Bumper	BLU-YEL	2P12-6, 8P3-14	Q8	SG-23-850-DC
21	Drop Target Release	BLU-GRN	2P12-8, 8P3-15	Q10	SA3-24-750-DC
*22	Left Kicker	BLU-BLK	2P12-9, 8P3-16	Q12	SG-23-800-DC
	Inside Right Flipper	BLU-VIO	7P1-8, 8P3-3	-	SFL-19-400/
					30-750-DC
	Outside Right Flipper	BLK-YEL	7P1-31, 8P3-9	_	SFL-19-400/
					30-750-DC
	Left Flipper	BLU-GRY	7P1-10, 8P3-4	-	SFL-19-400/
	''				30-750-DC
$\overline{}$	L				

*NOTES:

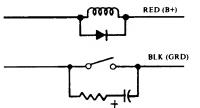
1. Special switch connections for solenoids 17 through 22 are as follows:

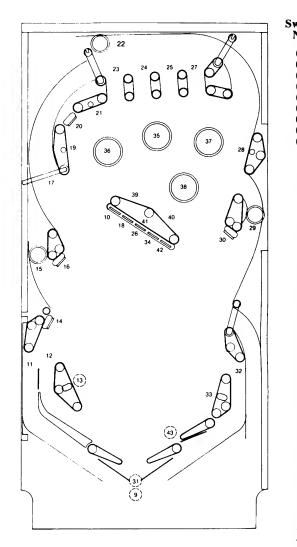
- 17 -- ORN-BRN -- 2P13-5, 8P3-5 18 -- ORN-RED -- 2P13-3, 8P3-6 19 -- ORN-BLK -- 2P13-2, 8P3-7 20 -- ORN-YEL -- 2P13-4, 8P3-8 22 -- ORN-BLU -- 2P13-9, 8P3-10

- 2. Flipper button connections are as follows:

Right -- ORN-VIO -- 2P12-1, 7P1-7 Left -- ORN-GRY -- 2P12-2, 7P1-9

3. Typical wiring for solenoids and special switches:





Function (Score)
Plumb Bob Tilt
Ball Roll Tilt
Credit Button
Right Coin Switch
Center Coin Switch
Left Coin Switch
Slam Tilt
High Score Reset
Outhole
"A" Drop Target (1000*)
Left Special (10,000)
Left Inside Rollover (1000)
Left Kicker (10)
Lower Left Joker Target
(1000/10,000**)
Spade Ace Eject Hole (500)
Middle Left Joker Target
(1000/10,000**)
Spinner (100/1000)
"K" Drop Target (1000*)
Lower Top Standup (500)
Lower Top Standup (500) Top Joker Target (1000/10,000**)
Top Standup (50)
Club Ace Eject Hole (500)
King of Hearts Rollover (1000)
King of Clubs Rollover (1000)
King of Diamonds Rollover (1000
"Q" Drop Target (1000*)
King of Spades Rollover (1000)
Top Right Standup (500)
Heart Ace Eject Hole (500)
Right Joker Target (1000/10,000*
Playfield Tilt
Right Special (10,000)
Lower Right Standup (10)
"J" Drop Target (1000*)
Center Jet Bumper (100/1000)
Left Jet Bumper (100/1000)
Right Jet Bumper (100/1000)
Bottom Jet Bumper (100/1000)
Left Center Standup (10) Right Center Standup (10)
5 Bank Standup (50)
"10" Drop Target (1000*)
Right Flipper LANE
CHANGE Switch
CHANGE SWICH

^{*}Drop Targets score only when made in sequence. Second value is lit or flashing ** value.

COLUMN	1 GRN-BRN 2J2-9	2 GRN-RED 2J2-8	3 GRN-ORN 2J2-7	4 GRN-YEL 2J2-6	5 GRN-BLK 2J2-5	6 GRN-BLU 2J2-3	7 GRN-VIO 2J2-2	8 GRN-GRY 2J2-1
WHT- 1 BRN 2J3-9	PLUMB BOB TILT	оитноге 9	SPINNER 17	KING OF DIAMONDS ROLLOVER 25	LOWER RIGHT STANDUP 33	5 BANK STANDUP	NOT USED 49	NOT USED 57
WHT- 2 RED 2J3-8	BALL ROLL TILT	A." DROP TARGET 10	"K" DROP TARGET 18	"O" DROP TARGET 26	.g DROP TARGET 34	"10" DROP TARGET 42	NOT USED 50	NOT USED 58
WHT- 3 ORN 2J3-7	CREDIT BUTTON 3	SPECIAL 11	LOWER TOP STANDUP	KING OF SPADES ROLLOVER	CENTER JET BUMPER	RIGHT FLIPPER LANE CHANGE SWITCH 43	NOT USED 51	NOT USED 59
WHT- 4 YEL 2J3-6	RIGHT COIN SWITCH	LEFT INSIDE ROLLOVER 12	TOP JOKER TARGET 20	TOP RIGHT STANDUP 28	LEFT JET BUMPER 36	NOT USED 44	NOT USED 52	NOT USED 60
WHT- 5 GRN 2J3-5	CENTER COIN SWITCH 5	LEFT KICKER 13	TOP STANDUP 21	HEART ACE EJECT HOLE 29	RIGHT JET JUMPER 37	NOT USED 45	NOT USED 53	NOT USED 61
WHT- 6 BLU 2J3-4	LEFT COIN SWITCH	LOWER LEFT JOKER TARGET 14	CLUB ACE EJECT HOLE	RIGHT JOKER TARGET	BOTTOM JET BUMPER	NOT USED 46	NOT USED 54	NOT USED 62
WHT- 7 VIO 2J3-3	SLAM TILT 7	SPADE ACE EJECT HOLE 15	KING OF HEARTS ROLLOVER	PLAYFIELD TILT 31	LEFT CENTER STANDUP 39	NOT USED 47	NOT USED 55	NOT USED 63
WHT- 8 GRY 2J3-1	HIGH SCORE RESET	MIDDLE LEFT JOKER TARGET 16	KING OF CLUBS ROLLOVER	RIGHT SPECIAL	RIGHT CENTER STANDUP	NOT USED 48	NOT USED 56	NOT USED 64

Figure 5. Switch Matrix

	COLUMN	1 YEL-BRN	2 YEL-RED	3 YEL-ORN	4 YEL-BLK	5 YEL-GRN	6 YEL-BLU	7 YEL-VIO	8 YEL-GRY
ROW	٧ /	235-8	215-9	2J5-6	235-7	2J5-3	2J5-5	2J5-1	215-2
-	RED- BRN 2J7-1	SAME PLAYER SHOOTS AGAIN	2X	ROYAL FLUSH 2X	ACE OF HEARTS	LOWER LEFT JOKER	4,000 BONUS	NOT	#1 PLAYER UP
7	RED- BLK 2J7-2	LEFT SPECIAL	3X	ROYAL FLUSH 3X AND LEFT SPIN 1000	ACE OF SPADES	MIDDLE LEFT JOKER	6,000 BONUS	1 CAN PLAY	#2 PLAYER UP
က	RED- ORN 2J7-3	RIGHT SPECIAL	4X	ROYAL FLUSH 4X	ACE OF CLUBS	TOP LEFT JOKER	8.000 BONUS	2 CAN PLAY	#3 PLAYER UP
4	RED- YEL 2J7-4	.d.,	X9	ROYAL FLUSH 20.000	ADVANCE ROYAL FLUSH	RIGHT JOKER	10,000 BONUS	3 CAN PLAY	#4 PLAYER UP
2	RED- GRN 2J7-5	O.,	HEART	ROYAL FLUSH 40.000	LEFT JET BUMPER	EXTRA BALL WHEN LIT (X2)	12,000 BONUS	4 CAN PLAY	בורב
9	RED- BLU 2J7-6	" . ",	CLUB	ROYAL FLUSH 60,000	CENTER JET BUMPER	20,000 BONUS	14,000 BONUS	МАТСН	GAME OVER
7	RED- VIO 2J7-9	Ë	D!AMOND K!NG	ROYAL FLUSH 80.000	BOTTOM JET BUMPER	40,000 BONUS	16,000 BONUS	BALL IN PLAY	SAME PLAYER SHOOTS (BACKBOX)
8	RED- GRY 2J7-8	.H.	KING	ROYAL FLUSH 100,000	RIGHT JET BUMPER	2.000 BONUS	18.000 BONUS	CREDITS (PLAYFIELD)	HIGH SCORE